### Organisation, Fees, Registration

#### Organisation and content

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#### **Payment**

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#### **Participation Conditions**

- Registration is possible until 19<sup>th</sup> september
- Reduced prices for early registration (until 10<sup>th</sup> July) and employees of universities
- Cancellation (email or fax):
  - until 19<sup>th</sup> september: a service fee of 50€ has to be paid
  - > later cancellation: 80% of participation fee will be invoiced and the symposium abstracts will be send to you

#### Notification:

In 2011 the courses will be held only in English language. German participants can get the course notes in German language. In 2012 the workshop and the courses will be held again in German language.

#### Participation fee

The participation fee includes extensive course-ware (courses), a book of abstracts (symposium), as well as refreshments and one dinner (per event):

	Regular Price	reduced A	reduced B	reduced C
Basic Course	790€	730€	690€	490€
Nano Course	790€	730€	690€	490€
Symposium	390€	360€	290€	210€

A: members of GVT

B: early registration

C: member of university or speaker

For registration as well as further and current information please visit our homepage:

www.isgd.ipat.tu-bs.de

Abstracts for the international Symposium can be submitted until 3<sup>rd</sup> of April 2011, with the scale of one DIN-A4 page (as MS-word-file) via email to <a href="https://h.bockholt@tu-braunschweig.de">h.bockholt@tu-braunschweig.de</a>

The Symposium will be supplemented by an exhibition. Interested exhibitors please contact Nina Barth (nina.barth@tu-braunschweig.de) for further details.

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12<sup>th</sup> Basic Course 7<sup>th</sup> Symposium 2<sup>nd</sup> Nano Course

# Fine Grinding and Dispersing

10<sup>th</sup> - 13<sup>th</sup> October 2011, Braunschweig

In co-operation with:
GVT Forschungs-Gesellschaft
Verfahrens-Technik e.V.

# Basic Course 10th and 11th October 2011

Grinding and dispersing with stirred media mills represent important process steps in many branches of industry. The knowledge of the physical phenomena inside the mill and the industrial applications have improved significantly in the last 10 years.

The course gives an overview about the physical phenomena of grinding and dispersing in stirred media mills, and shows how this knowledge can be used for the design and optimization of grinding and dispersing processes, such as milling.

Moreover, the effect of important operating parameters on the grinding and dispersing result as well as the transport behaviour and operating mode of stirred media mills are presented. Last but not least, design aspects of stirred media mills as well as questions of scale-up are addressed.

#### Themes:

- basic definitions
- methods of particle size analysis
- models for describing grinding and dispersing processes
- influence of different parameters on the grinding and dispersing result
- transport behaviour and operation mode
- operation of stirred media mills
- scale-up

#### With lectures by:

- Prof. Dr.-Ing. Arno Kwade
- Dr.-Ing. Ingo Kampen
- Dr.-Ing. Sandra Breitung-Faes

## Nano Course 10<sup>th</sup> and 11<sup>th</sup> October 2011

In the last years nano-particles have become more important in technology and in many practical applications. Relevant examples are pharmaceutical ingredients for better bioavailability, manufacturing of suspensions for coatings and nanocomposites as well as production of CMP-suspensions for the semiconductor industry.

Consequently, applications of nanotechnology have an increasing influence on research and development concerning stirred media mills.

Therefore this advanced course focuses on nanoparticle production via top-down-techniques and the associated questions and challenges regarding stabilisation of the suspension, product contamination and targeted adjustment of product properties.

#### Themes:

- product requirements
- measuring technology especially for nanoparticles
- particle interactions and stabilization
- grinding and dispersing of nanoparticles
- mill designs for special applications

#### With lectures by:

- Prof. Dr.-Ing. Arno Kwade
- Junior-Prof. Dr. Georg Garnweitner
- Dr.-Ing. Ingo Kampen
- Dr.-Ing. Sandra Breitung-Faes
- Dr.-Ing. Carsten Schilde

### Symposium

12<sup>th</sup> and 13<sup>th</sup> October 2011

The International Symposium is held every two years and represents an international forum for manufacturers and users of fine grinding and dispersing devices, industry, research institutes and members of different branches (inks, chemicals, pharmaceuticals, ceramics, fillers, minerals and so on).

No other meeting gives such a good possibility to meet representatives of milling and dispersing device manufacturers as well as users from many different industries. As a participant of the symposium you will get many suggestions for designing and optimizing your own milling or dispersing process.

#### Themes:

- new developments in fine grinding and dispersing technology including predispersing equipment
- milling, dispersing and stabilisation of nanoparticles
- novel practical applications e.g. from pharmacy
- new developments in dry grinding processes
- recent knowledge in milling operation and performance including usage of simulation methods like discrete element modelling

#### With presentations by:

- mill and other dispersing machine manufacturers
- analytic equipment manufacturers
- researchers from industry and university
- members of different industries applying mills and dispersing devices to produce high-quality products